PRE-INSPECTION COVER SHEET AND INSPECTION PLAN

INSPECTORS: Lead: _Ron Rolph Other:	REPORT NO: INSP DATES: DRP INSP END	Calvert Cliffs50-317 / 2010-003 & 6/7 - 11/2010_ DATE:*6/30/2010_ le resident inspection	50-318 / 2010-003	6/1
Check One: FeederX	DRSX	Team		
Type of Inspection: (Check CPIR Re-Qual (Feeders)SPA	Supplemental	SSDI EP Program	Exams OSRE	
INSPECTION PLAN (ATTAC	HED OR SUMMARIZED	BELOW): see attach	ed	
ATTACHED				
INSPECTION PROCEDURE Procedure-Occ. Nos IPE Co. 71124 - 06 BI 71124 - 08 BI TI 2515/173 BI IFS ITEMS ASSIGNED FOR None -	Title of Procedure Radioactive Gase Liquid Effluent Tr Rad Material Cor Industry Ground REVIEW	eous and reatment htrol & Transport. Water Initiative	RPS/IP (Y/N) Y Y Y cription	
ALLEGATIONS ASSIGNED	FOR REVIEW			
Procedure-Occ. Nos AF None - AF	IPE Code ALG -Nur AF	<u>mber</u> <u>Brief Des</u>	<u>cription</u>	
PROJECTS COORDINATIO	N: Date Discussed with [ORP Branch Chief:		
COORDINATED: (DRP)	ACKNOWLEDGI (Accomp.		PPROVED:	
ARRANGEMENTS:				
Hotel: <u>Hilton Garder</u>	<u>Inn</u>	Phone: _	_1- 410-326-0366	

Radioactive gaseous and Liquid Effluent Treatment 71124.06 Inspection Plan

Site: Calvert Cliffs Dates: 6/7-11/2010

- 1) Review recent effluent release report radiological environmental operating report. (.06 / 2.01 a.)
- 2) Review the FSAR and ODCM. (.06 / 2.01 b.)
- 3) Review Groundwater Protection Initiative (GPI) Program. (.06 / 2.01 c.)
- 4) Review LER's, event reports, special reports, effluent program implementing procedures, and any third party evaluation reports. (.06 / 2.01 d.)
- 5) Walk down selected components of the gaseous and liquid discharge systems to verify configuration and material condition. (.06 / 2.02 a.)
- 6) Review surveillance records for those areas associated with the systems selected, that are not readily accessible due to radiological conditions. (.06 / 2.02 b.)
- 7) Walk down filtered ventilation systems to verify conditions. (.06 / 2.02 c.)
- 8) If possible, observe sample collection and analysis of gaseous waste processing. (.06 / 2.02 d.)
- 9) Verify if the licensee has made significant changes to their effluent release points. (10 CFR 50.59 review or require NRC approval) (.06 / 2.02 e.)
- 10) If possible, observe sample collection and analysis of the liquid waste processing. (.06 / 2.02 f.)
- 11) As available, observe three to five sampling activities to verify adequate controls are implemented to ensure representative samples are obtained. (.06 / 2.03 a.)
- 12) As available, for one to three effluent discharges made with inoperable effluent radiation monitors, verify the controls to ensure compensatory sampling are implemented to ensure that the release of unmonitored liquid and gaseous effluents are prevented. (.06 / 2.03 b.)
- 13) Review the frequency of the use of compensatory sampling in lieu of adequate system maintenance. (.06 / 2.03 c.)
- 14) Review the results of the inter-laboratory comparison program. Verify the inter-laboratory comparison program include hard-to-detect isotopes. (.06 / 2.03 d.)
- 15) Review effluent and stack and vent flow rates and compare with the ODCM or FSAR values. (.06 / 2.04 a.)
- 16) Verify surveillance test results meet Technical Specifications acceptance criteria. (.06 / 2.04 b.)
- 17) Review significant changes in reported dose values compared to the previous Radiological Environmental Release Report and the factors that could have resulted in the change. (.06 / 2.05 a.)
- 18) Review one to three liquid and one to five gaseous waste discharge permits. (.06 / 2.05 b.)
- 19) Review the Part 61 analysis and methods used to determine the isotopes that are included in the source term. (.06 / 2.05 c.)
- 20) Review changes to the ODCM since the last inspection. (.06 / 2.05 c.)
- 21) Review the latest Land Use Census and verify that the changes have been factored into the dose calculations. (.06 / 2.05 e.)
- 22) Verify calculated doses for the release permits reviewed are within the 10 CFR Part 50, Appendix I and Technical Specification dose criteria. (.06 / 2.05 f.)
- 23) As available, review any, up to three, abnormal gaseous or liquid discharges. Verify evaluation(s) were performed to satisfy 10 CFR 20.1501 to account for the source term and projected dose to the public. (.06 / 2.05 g.)
- 24) Review monitoring results of the GPI and verify the licensee is implementing the program as intended and identify any anomalous results. (.06 / 2.06 a.)
- 25) Review leakage of spill events and entries made into 10 CFR 50.75 (G) records. (.06 / 2.06 b.)
- 26) Review actions taken for unmonitored spills, leaks, unexpected discharges. (.06 / 2.06 c.)
- 27) Review the evaluation of discharges from onsite surface water bodies. (.06 / 2.06 d.)
- 28) Verify that on-site ground water sample results are included in the Annual radiological Environmental Operating Report or the Annual Radiological Effluent Release Report. (.06 / 2.06 e.)
- 29) For significant, new effluent discharge points, verify the ODCM has been updated to include these points. (.06 / 2.06 f.)
- 30) Verify that problems associated with the effluent program are entered into the corrective action program. (.06 / 2.07)

Radioactive Solid Waste Processing and Radioactive Material Control 71124.08 Inspection Plan

Site: Calvert Cliffs

Dates: June 7-11, 2010

- 1) Review solid waste system description in the FSAR and recent effluent release report. (.08 / 2.01 a.)
- 2) Review the scope of any QA audits of the solid waste processing system/program. (.08 / 2.01 b.)
- 3) For 1 to 3 areas where radioavtive waste containers are stored, verify containers are labeled correctly IAW 10 CFR 20.1904. (.08 / 2.02 a.)
- 4) Verify radioactive material storage areas are controlled and posted IAW 10 CFR 20. (.08 / 2.02 b.)
- 5) Verify that the licensee has established a process for monitoring the impact of long term storage sufficient to identify potential unmonitored, unplanned releases or nonconformance with waste disposal requirements. (.08 / 2.02 c.)
- 6) For 5 to 10 containers of stored radioactive materials, verify there are no signs of swelling, leakage, or deformation. (.08 / 2.02 d.)
- 7) For 1 to 3 liquid or solid radioactive waste processing systems, walk down accessible portions to verify that the current system configuration and operation agree with the FSAR, ODCM, and PCP. (.08 / 2.03 a.)
- 8) For a radioactive waste processing system that is not operational and/or is abandoned in place, verify the licensee has established admin and/or physical controls to ensure the system will not contribute to an unmonitored release or be a source of unnecessary personnel exposure. (.08 / 2.03 b.)
- 9) Verify that any changes to the Rad waste processing system since the last inspection were reviewed and documented IAW 10 CFR 50.59 and review the impact ton dose to the public. (.08 / 2.03 c.)
- 10) For 1 to 3 processes for transferring rad waste resin/sludge into shipping/disposal containers, verify waste stream mixing, sampling, and concentration averaging are consistent with the PCP (.08 / 2.03 d.)
- 11) Verify tank recirculation provides sufficient mixing (min 3 volumes). (.08 / 2.03 e.)
- 12) Verify the PCP correctly describes the current methods and procedures for dewatering and stabilization. (.08 / 2.03 f.)
- 13) For 2 to 3 rad waste streams, verify the sample analysis and use of scaling factors and calculations is technically sound and based on current 10 CFR 61 analysis. (.08 / 2.04 a.)
- 14) For the waste streams selected, verify plant operational parameters are taken into account. (.08 / 2.04 b.)
- 15) Verify the licensee has and maintains an adequate QA program. (.08 / 2.04 c.)
- 16) Observe shipment packaging, surveying, labeling, marking, placarding, vehicle checks, emergency instructions, disposal manifest, shipping papers provided to the driver, and licensee verification of shipment readiness. (.08 / 2.05 a.)
- 17) Verify, as applicable, and cask COC has been met. (.08 / 2.05 a.)
- 18) Verify the receiving licensee is authorized to receive shipment. (.08 / 2.05 a.)
- 19) Observe radiation workers during the conduct of radioactive waste processing and rad material shipment preparation and receipt, verify shippers are knowledgeable, demonstrate adequate skills. (.08 / 2.05 b.)
- 20) Verify shipping personnel are adequately trained. (.08 / 2.05 b.)
- 21) For 3 to 5 non-excepted package shipment records, verify that shipping documents indicate the proper shipping name, emergency response information, 24 hour contact telephone number, accurate curie content, volume of material, appropriate waste classification, transport index, and UN number. (.08 / 2.06)
- 22) Verify the shipment has appropriate placarding. (.08 / 2.06)
- 23) Verify problems are entered into the CR system. (.08 / 2.07 a.)
- 24) Review selected audits, evaluate the adequacy of the CAs for the issues identified. (.08-2.07 b.)